

# EXHIBIT 1



**JOHNS  
HOPKINS**  
**Otolaryngology-  
Head and Neck Surgery**



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The Editor  
Nature Genetics  
345 Park Avenue, 10th Floor  
New York, New York 10010- 1707

Dear Editor:

Please consider our manuscript entitled, "High frequency of *BRAF* mutation in papillary thyroid carcinoma," For publication in *Nature Genetics* as *Brief Communications*.

On the heels of the identification of the *BRAF* as an important oncogenic protein in melanoma, we have discovered a high frequency of *BRAF* mutations in Papillary thyroid cancer. *BRAF* mutations now represent the most common genetic alteration in these common thyroid neoplasms. Previously, an inverse correlation between ras mutations and *BRAF* mutations were described in a limited number of tumors. We also found an inverse correlation between RASSF1A methylation and *BRAF* mutations in these cancers. Our results thus confirm the importance of map kinase signaling pathway activation in thyroid cancers. We believe that this information will be of great interest to a wide scientific audience.

Thank you as always for reviewing our work.

Sincerely,

David Sidransky, M.D.  
Director, Head and Neck Cancer Research  
Professor, Otolaryngology - Head and Neck  
Surgery, Oncology, Pathology, Urology,  
& Cellular and Molecular Medicine